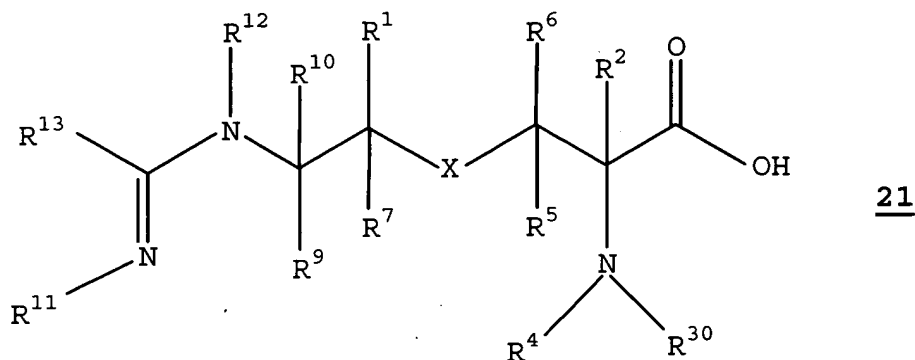


CLAIMS

What is claimed is:

- 5 1. A method for the preparation of a compound or a pharmaceutically acceptable salt thereof, the compound having a structure corresponding to Formula 21:



- 10 or a salt thereof,
wherein:

X is selected from the group consisting of -S-, -S(O)-, and -S(O)₂-;

R² is selected from the group consisting of C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₁-C₅ alkoxy-C₁ alkyl, and C₁-C₅ alkylthio-C₁ alkyl;

- 15 R³⁰ is selected from the group consisting of -H, -OH, -C(O)-R¹⁷, -C(O)-O-R¹⁸, and -C(O)-S-R¹⁹;

R¹, R⁵, R⁶, and R⁷ independently are selected from the group consisting of -H, halogen, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, and C₁-C₅ alkoxy-C₁ alkyl;

- 20 R⁹ and R¹⁰ independently are selected from the group consisting of -H, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, and C₁-C₅ alkoxy-C₁ alkyl;

with respect to R¹¹ and R¹²:

R¹¹ is selected from the group consisting of -H, -OH, -C(O)-O-R²⁴, and -C(O)-S-R²⁵; and R¹² is selected from the group consisting of -H, -OH, -C(O)-O-R²⁶, and -C(O)-S-R²⁷; or

R^{11} is -O-, and R^{12} is -C(O)-, wherein R^{11} and R^{12} together with the atoms to which they are attached form a ring; or

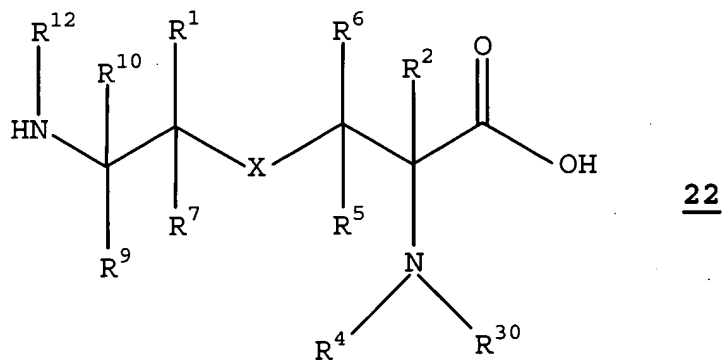
R^{11} is -C(O)-, and R^{12} is -O-, wherein R^{11} and R^{12} together with the atoms to which they are attached form a ring; and

5 R^{13} is C_1 alkyl;

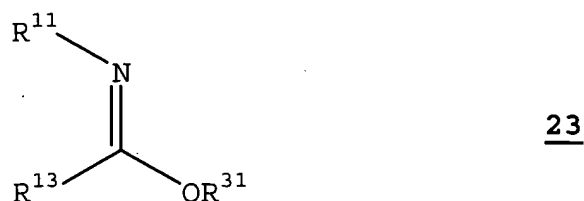
R^{17} , R^{18} , R^{19} , R^{24} , R^{25} , R^{26} , R^{27} , and R^{27a} independently are selected from the group consisting of -H and alkyl, which is optionally substituted by one or more moieties selected from the group consisting of cycloalkyl, heterocyclyl, aryl, and heteroaryl; and

10 when any of R^1 , R^2 , R^4 , R^5 , R^6 , R^7 , R^9 , R^{10} , R^{11} , R^{12} , R^{13} , R^{14} , R^{15} , R^{16} , R^{17} , R^{18} , R^{19} , R^{24} , R^{25} , R^{26} , R^{27} , and R^{27a} independently is a moiety selected from the group consisting of alkyl, alkenyl, alkynyl, alkoxy, alkylthio, cycloalkyl, heterocyclyl, aryl, and heteroaryl, then the moiety is optionally substituted by one or more substituent selected from the group consisting of -OH, alkoxy, and halogen;

15 wherein the method comprises treating a diamine compound having a structure corresponding to Formula 22:



20 or a pharmaceutically acceptable salt thereof, with an alkyl acetimidate having a structure corresponding to Formula 23:



or a salt thereof, wherein R^{31} is C_1 - C_6 alkyl,

to produce the compound corresponding to Formula **21**.

2. The method of Claim 1 wherein R^{11} is selected from the group consisting of -H and
5 -OH.
3. The method of claim 2 wherein R^{11} is -H.
4. The method of Claim 2 wherein R^{11} is -OH.
- 10 5. The method of Claim 2 wherein R^{13} is methyl or halomethyl.
6. The method of Claim 5 wherein R^{13} is methyl.
- 15 7. The method of Claim 2 wherein R^{31} is C_1 - C_3 alkyl.
8. The method of Claim 7 wherein R^{31} is ethyl.
9. The method of Claim 1 wherein the treating of the diamine compound with the alkyl
20 acetimidate compound is performed in the presence of a base.
10. The method of Claim 9 wherein the base is selected from the group consisting of a
hydrazine, a metal sulfide, a metal hydroxide, a metal alkoxide, an amine, a
hydroxylamine, a metal amide complex, and a basic resin.
- 25 11. The method of Claim 10 wherein the base is a basic resin.
12. The method of Claim 11 wherein the basic resin is a polymer-bound
diazabicyclo[4.4.0]dec-2-ene.
- 30 13. The method of Claim 10 wherein the base is an amine.

14. The method of Claim 13 wherein the base is selected from the group consisting of 1,5-diazabicyclo[4.3.0]non-5-ene; 1,4-diazabicyclo[2.2.2]octane; and 1,8-diazabicyclo[5.4.0]undec-7-ene.

5

10